

NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

BEDDING

(Ac.)

CODE 310

DEFINITION

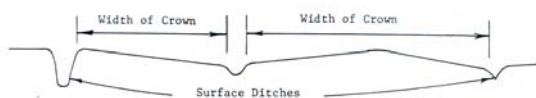
Plowing, blading, or otherwise elevating the surface of flat land into a series of broad, low ridges separated by shallow, parallel channels.

SCOPE

Crowning

Shaping an area of land into adjacent, parallel strips known as crowns. Crowns are greater than sixty (60) feet in width and of any length. Surface slopes are provided across each crown. The side boundaries of each crown are formed by some type of surface ditch, except one side may be formed by a fence or road.

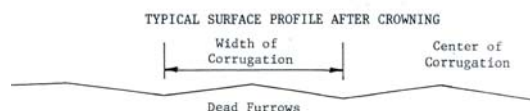
TYPICAL SURFACE PROFILE AFTER CROWNING



Corrugating

Shaping an area of land into adjacent parallel strips known as corrugations. Corrugations have a minimum width of thirty (30) feet, a maximum average width of eighty (80) feet, and may be of any length. Surface slopes are provided from the center of each corrugation to both sides. The side boundaries of each corrugation are formed by dead furrows, except one side may be formed by a fence, road or some type of existing surface ditch. The dead furrows conduct runoff to cross ditches.

TYPICAL SURFACE PROFILE AFTER CROWNING



CONDITIONS WHERE PRACTICE APPLIES

Bedding shall be done only as a part of an existing drainage system, or as part of an overall drainage plan in keeping with the land capabilities of the area.

Crowning is intended for use on land devoted to sugarcane, or sugarcane in rotation with other row crops or grassland. It may be used on poorly drained flat lands devoted to grass. Crop rows shall be parallel with crown length.

Corrugating is limited to poorly drained flat lands devoted to grass. All corrugations shall be vegetated.

DESIGN CRITERIA

Crowning

The surface cross slope of not less than 0.3 percent may extend from the center of the crown to both sides, or may extend from one side of the crown to the opposite side.

Row (quarter) drains shall be provided where required to provide free movement of water from the crown to the ditch bordering the crown when the crowned area is in row crops.

Cross ditches shall be provided for each crowned area as outlets for the ditches bordering each crown. The location of cross ditches shall be determined by topography, field boundaries, or by the capacity limits of the ditches bordering the crowns.

Ditches bordering the crowns in row crop land may be split ditches, or V-type, or trapezoidal. They shall have design capacities adequate to carry runoff from their drainage areas.

Ditches bordering crowns in pasture land shall have adequate capacities and minimum 0.5 foot depths below the edges of the crowns. Side slopes should be 4:1 or flatter but may be constructed to be compatible with planned maintenance.

Corrugating

The surface cross slope shall extend from the center of the corrugation to both sides. The center of the unsettled corrugation should be a minimum 0.5 foot higher than the bottom of the dead furrow. A minimum of 0.3 foot will be acceptable.

Drainage of the dead furrows shall be provided by surface ditches. The location of ditches shall be determined by topography and field boundaries. A field ditch shall be provided to limit the corrugation length to that needed to provide adequate drainage.

The bottom of field ditches shall be not less than 0.2 foot, and, if practicable, not more than 0.8 foot below the bottom of the dead furrows. They shall have side slopes not steeper than 3:1. Flatter side slopes are desirable.

However, existing ditches with side slopes steeper than 3:1 may be used to drain dead furrows, provided they have capacities and depths adequate for removal of runoff.